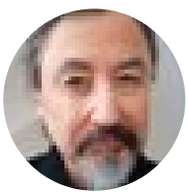
Peter Suber @petersuber@fediscience.org
@petersuber

Since the pandemic shutdown began, journal submissions of co-authored papers, with women among the co-authors, are slightly up, and solo-authored papers by women are significantly down.

insidehighered.com
Early journal submission data suggest COVID-19 is tanking women's

3:22 PM · Apr 22, 2020 · Twitter Web App

38 Retweets **7** Quote Tweets **61** Likes



Peter Suber @petersube... ... · May 13, 2020

Replying to @petersuber

Update.

theguardian.com/education/2020...

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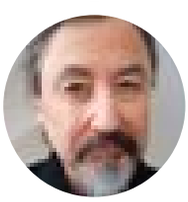
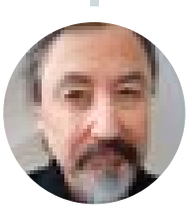


Peter Suber @petersube... ... · May 19, 2020

Update.

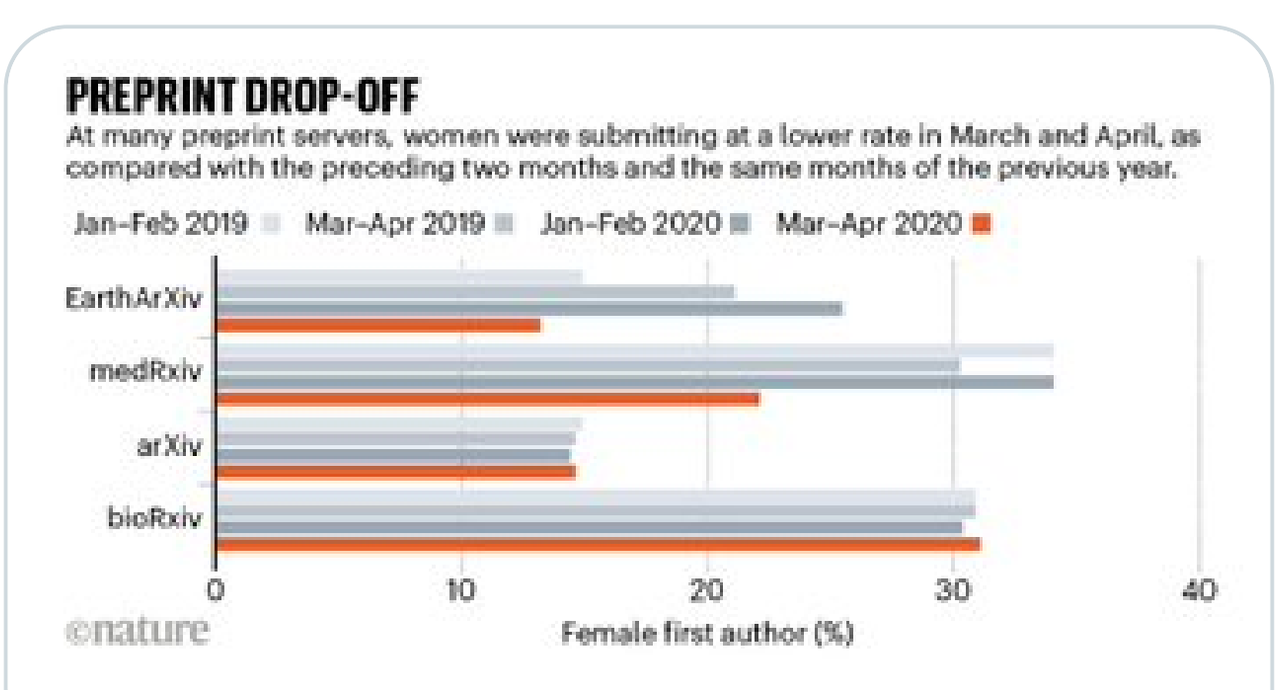
natureindex.com/news-blog/decl...

1 3 3



Peter Suber @petersube... ... · May 21, 2020

Update.



nature.com

How female academics are losing ground during the pandemic

1 2 4

Peter Suber @petersube... ... · Jun 22, 2020

Update: Gender Inequality in Research Productivity During the COVID-19 Pandemic

arxiv.org

Gender Inequality in Research Productivity During the COVID-1...

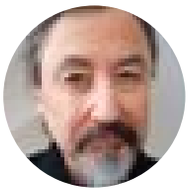
1 2 1

Peter Suber @petersube... ... · Jun 26, 2020

Update

timeshighereducation.com/news/pandemic-...

1 1 3



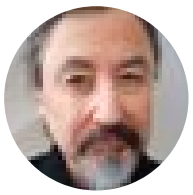
Peter Suber @petersuber... @... · Jul 8, 2020

Update. "Men and women have been disproportionately affected [by the pandemic]; for many [research] outputs, women were about 10 percentage points more likely than men to have decreased work."

sr.ithaka.org

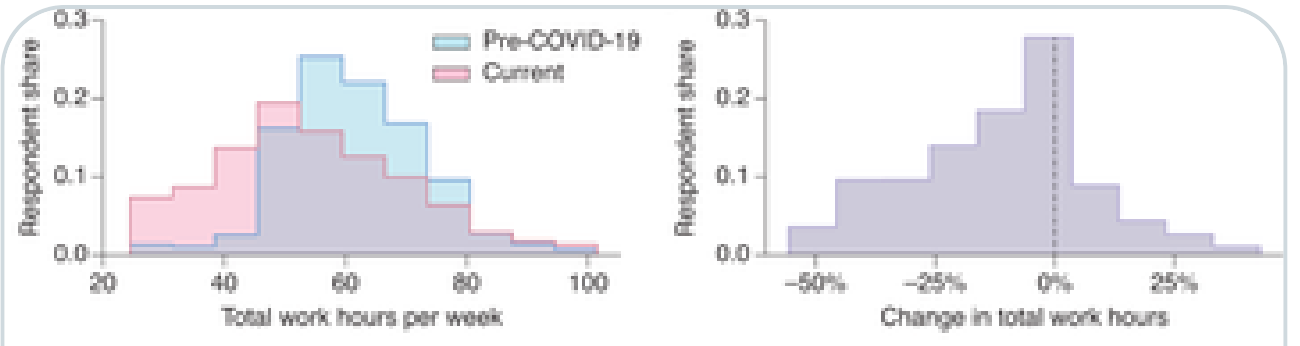
What about Research? Scholarship and COVID-19 - Ithaka S+R

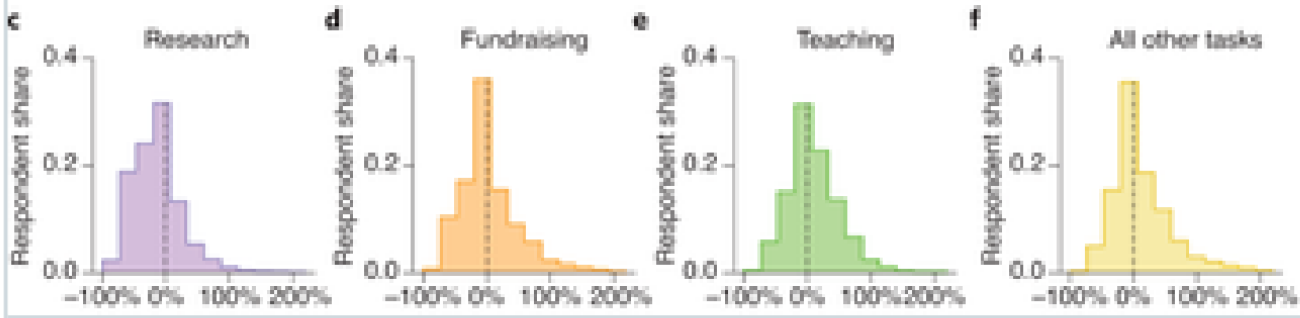
1 5 4



Peter Suber @petersuber... ... · Jul 16, 2020

Update. "Our female respondents reported larger declines in the time they could devote to research than their male colleagues. And scientists with young children appear to have been particularly hard-hit, especially women."





nature.com

Unequal effects of the COVID-19 pandemic on scientists

1 1 2

Peter Suber @petersuber... ... · Aug 9, 2020

Update. "The proportion of #COVID19 papers w/ a woman 1st author was 19% lower than...for papers pub'd in the same journals in 2019...Women's representation as 1st authors of COVID-19 research was particularly low for papers pub'd in March & April 2020."

eLife

elifesciences.org

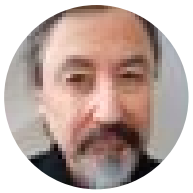
Meta-Research: COVID-19 medical papers have fewer ...

1 3 2

Peter Suber @petersuber... ... · Aug 9, 2020

Update. "Comparing 2020 with 2019, there was a 4% reduction in the percentage of women first authors [in @JAMASurgery], a 6% reduction of women last authors, and a 7% reduction in women as corresponding author."
jamanetwork.com/journals/jamas...

1 2 1



Peter Suber @petersuber... ... · Aug 9, 2020

Update (from April). "Six weeks into widespread self-quarantine, editors of academic journals have started noticing a trend: Women...seem to be submitting fewer papers."
thelily.com/women-academic...

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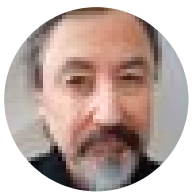


Peter Suber @petersuber... ... · Aug 9, 2020

Update. "Women are advising policymakers, designing clinical trials, coordinating field studies and leading data collection and analysis, but you would never know it from the media coverage of the pandemic."
timeshighereducation.com/blog/women-sci...

1 3

Peter Suber @petersube... ... · Aug 13, 2020

Update. Summarizing some of the research in this thread.

scientificamerican.com

Women in Science May Suffer Lasting Career Damage from COVID-19

1 2 2

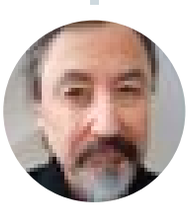
Peter Suber @petersube... ... · Aug 29, 2020

Update. "Months [after the lockdown began], journal submission rates for women have improved....But the...outlook...remains poor, with [many] K-12 schools still closed, childcare options & other services still...reduced, & a bumpy teaching semester ahead."

insidehighered.com

Women's journal submission rates continue to fall

1 1 1



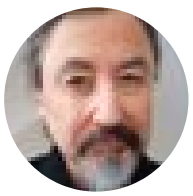
Peter Suber @petersube... ... · Sep 20, 2020

Update. Hopeful editorial on "how we [women] can be better and do better as editors, academics and individuals for ourselves, our colleagues and our journal."

link.springer.com

A Wench's Guide to Surviving a 'Global' Pandemic Crisis: Feminist Publishing in a Tim...

1 1 1



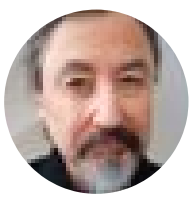
Peter Suber @petersuber... ... · Oct 7, 2020

Update (from June, missed at the time).

thelancet.com

Challenges for the female academic during the COVID-19 ...

1 1



Peter Suber @petersuber... ... · Oct 7, 2020

Update.
nytimes.com/2020/10/06/sci...

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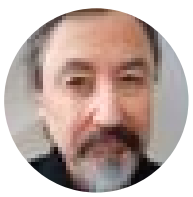


Peter Suber @petersube... ... · Oct 18, 2020

Update. "Women submitted proportionally fewer manuscripts [to Elsevier journals] than men during the COVID-19 lockdown months. This deficit was especially pronounced among women in more advanced stages of their career."

papers.ssrn.com/sol3/papers.cf...

1 2 1

Peter Suber @petersube... ... · Oct 23, 2020

Update. "A new study of enormous scale supports what numerous smaller studies have demonstrated throughout the pandemic: female academics are taking extended lockdowns on the chin, in terms of their comparative scholarly productivity."

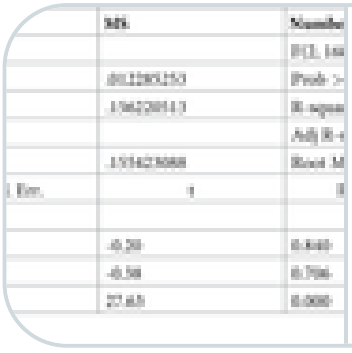
insidehighered.com

Large-scale study backs up other research showing relative declines

1 1 2

Peter Suber @petersube... ... · Oct 31, 2020

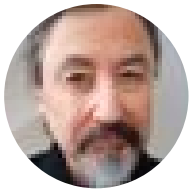
Update. "Even among elite scientists a pattern of stratified productivity and recognition by gender remains, with more prominent gaps in recognition."



journals.plos.org

Gender gaps in research productivity and recognition ...

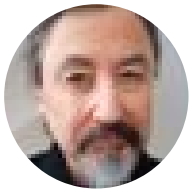
1 2 2



Peter Suber @petersuber... ... · Nov 2, 2020

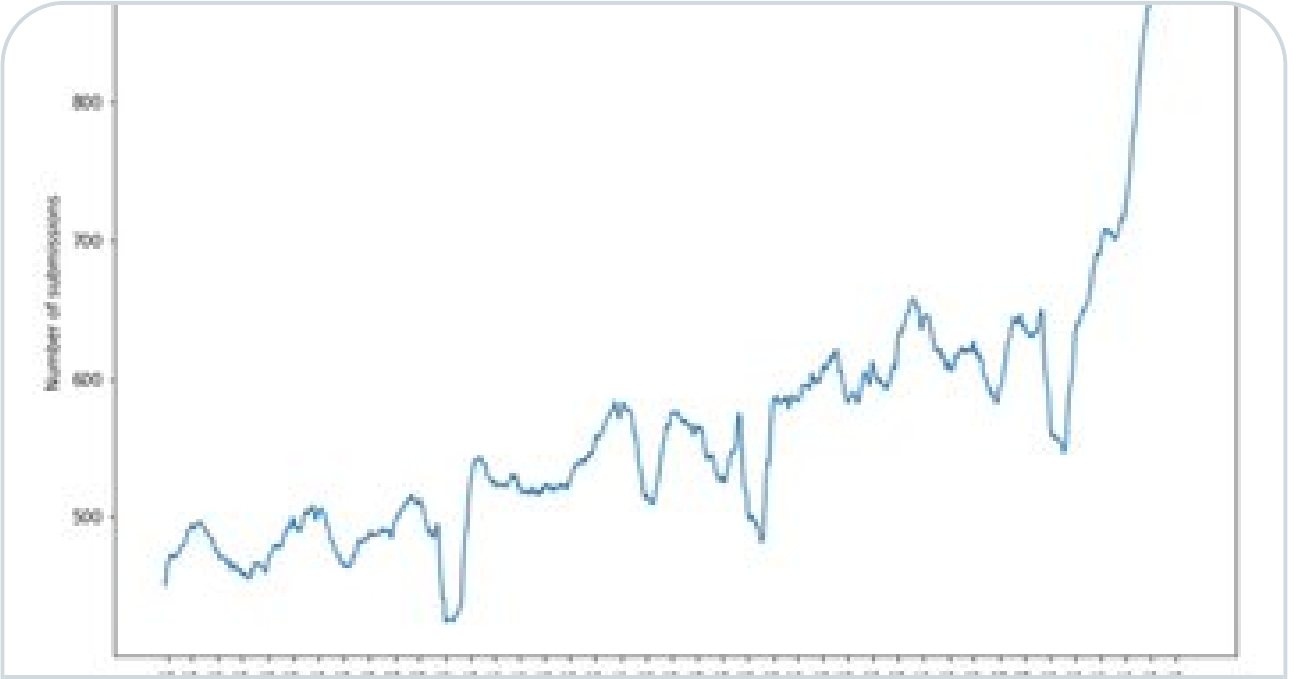
Update. "Optimistically, many academics thought initially that [remote work] might lead to a surge in research productivity....[If so, however,] all indications suggest that this has been a benefit for men in science, and not women."
journals.plos.org/ploscompbiol/a...

1 2



Peter Suber @petersuber... ... · Nov 8, 2020

Update. An argument to qualify or reinterpret the research (cited in this twitter thread above) showing a drop in research publications by women during the pandemic.



publisherad.medium.com

The COVID-surge in research papers: explaining the gender-disparity

1 1

Peter Suber @petersube... ... · Nov 16, 2020

Update. I missed this from November 2019 (note, prepandemic).

* original paper
rsc.org/globalassets/0...
* summary

nature.com

Huge study documents gender gap in chemistry publishing

1

Peter Suber @petersube... ... · Nov 18, 2020

Update. "Women submitted proportionally fewer manuscripts [to Elsevier journals] than men during the #COVID19 lockdown months. This deficit was especially pronounced among women in more advanced stages of their career." papers.ssrn.com/sol3/papers.cf...

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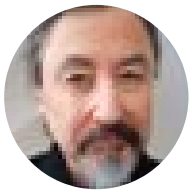
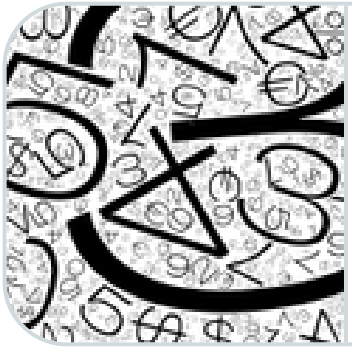


Peter Suber @petersube... ... · Dec 14, 2020

Update. "16% fewer women were lead authors for articles published on the preprint-platform medRxiv between December 2019 and April 2020, according to the IT professor Cassidy Sugimoto in an analysis published in Nature Index."



horizons-mag.ch

Fewer women published, and a threat to Open Access

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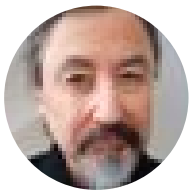
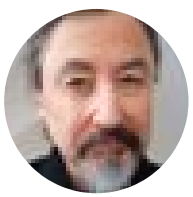


Peter Suber @petersube... ... · Dec 19, 2020

Update. "Although researchers submitted more papers to journals than last year, on average, growth in submissions from female authors trailed behind growth from male authors across all subject areas, and senior women saw the largest paper penalty."
nature.com/articles/d4158...

1 2 6



Peter Suber @petersube... ... · Dec 31, 2020

Update. "Compared to their male colleagues... mid-career women are spending less time on their primary research, writing less, reading fewer journal articles, applying for fewer grants, dedicating less time to research and publishing fewer articles."
blog.degruyter.com/wp-content/upl...

1 3

Peter Suber @petersuber... @... · Jan 7, 2021

Update, but on acceptance rates rather than submission rates. "Manuscripts submitted by women or coauthored by women are generally not penalized during...peer review...Manuscripts by [women] had even a higher probability of success in many cases."
advances.sciencemag.org/content/7/2/ea...

1

Peter Suber @petersube... ... · Jan 29, 2021

Update. This looks like good news, but it's #paywalled and I can't read it.

timeshighereducation.com
Female academics bounced back in publishing as lockdowns eased

2 2 2

Peter Suber @petersube... ... · Mar 10, 2021

Update. nap.edu/catalog/26061/...

From Ch 2, p. 7: "With variations by discipline, women... published fewer papers & received fewer citations... between March 2020 & December 2020 (Amano-Patino et al., 2020: Andersen et al., 2020; Gabster et al., 2020)."
nap.edu/read/26061/cha...

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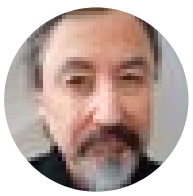
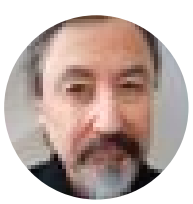


Peter Suber @petersube... ... · Mar 13, 2021

Update. "[Early in the] pandemic, MS submissions by female researchers to preprint servers across disciplines dropped significantly or increased less than their male colleagues. [The same happened] for womxn-led medical studies related to this pandemic."

journals.plos.org
Rebuild the Academy: Supporting academic mothers during ...

1 4 3



Peter Suber @petersube... ... · Mar 24, 2021

Update. "The proportion of women publishing in biomedical fields during the pandemic drops in average for 9.5% across disciplines and research topics....The impact is particularly pronounced for papers related to COVID-19 research."
preprints.jmir.org/preprint/25379...

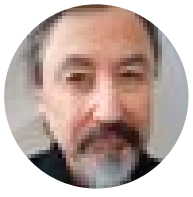
1 2 3

Peter Suber @petersube... ... · Mar 30, 2021

On the @PLOSBiology piece above. "Getting this paper pub'd was a bit of a struggle...[A] few journals [said they'd] already pub'd...about the impact of #COVID19 on women...'Here, ironically, was a [piece] written by moms...juggling kids & we were...too late.'"

udel.edu
Helping academic mothers

1 9 9



Peter Suber @petersube... ... · Mar 31, 2021

Update. "While the majority of faculty, regardless of gender, indicated that they worked much less on research than planned during the fall [2020] semester (57%), there was a 12 percentage point gap between women (62%) and men (50%)."

sr.ithaka.org

The Disproportionate Impact of the Pandemic on Women and Caregivers in Academia - ...

1 1 6

Peter Suber @petersube... ... · Apr 10, 2021

Update. "Women scientists have experienced a productivity penalty from the social and structural changes accompanying the COVID-19 pandemic, but not in all authorship positions."

osf.io

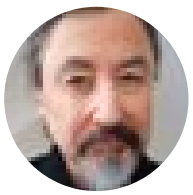
The Pandemic Penalty: The gendered effects of COVID-19 ...

1 2

Peter Suber @petersuber... ... · Apr 14, 2021

Update. "Several studies have found that women have published fewer papers, led fewer clinical trials and received less recognition for their expertise during the pandemic."
nytimes.com/2021/04/13/hea...

1 3

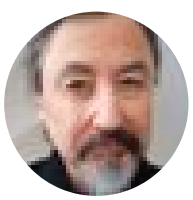


Peter Suber @petersuber... ... · Jul 23, 2021

Update. "Women were substantially under-represented as authors among articles in leading medical journals [in 2020, but] barriers to women's authorship...during COVID-19 are not significantly larger than barriers that preceded the pandemic."

bmjopen.bmj.com
Gender disparity between authors in leading medical ...

2 1 2



Peter Suber @petersuber... ... · Jul 28, 2021

Update. "How can tenure and promotion procedures adequately reflect gendered disparities in Covid impact?"
chronicle.com/article/the-pa...

1 2 4

Peter Suber @petersube... ... · Aug 19, 2021

Update. Summarizing pandemic-specific gender differences in productivity & aiming to understand the causes of these diffs, inc those that existed before the pandemic. "Parental engagement is a more powerful variable...than the mere existence of children."

arxiv.org
The academic motherload: Models of parenting engageme...

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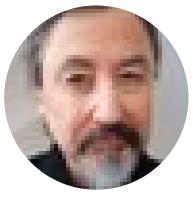


Peter Suber @petersube... ... · Sep 28, 2021

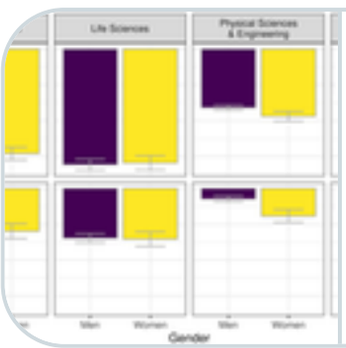
Update. "After the onset of the COVID-19 pandemic in March 2020, the number of submissions [to Renaissance Quarterly from @RSAorg] by female scholars fell sharply....We look forward to rectifying this imbalance in our 2022 volume and beyond."

cambridge.org
Editors' Note | Renaissance Quarterly | Cambridge Core

1 2 4

Peter Suber @petersube... ... · Oct 22, 2021

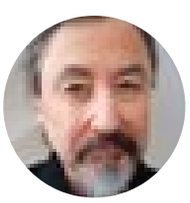
Update. "During the first wave of the pandemic, women submitted proportionally fewer manuscripts than men. This deficit was especially pronounced among more junior cohorts of women academics."



journals.plos.org

Gender gap in journal submissions and peer review ...

1 1 2

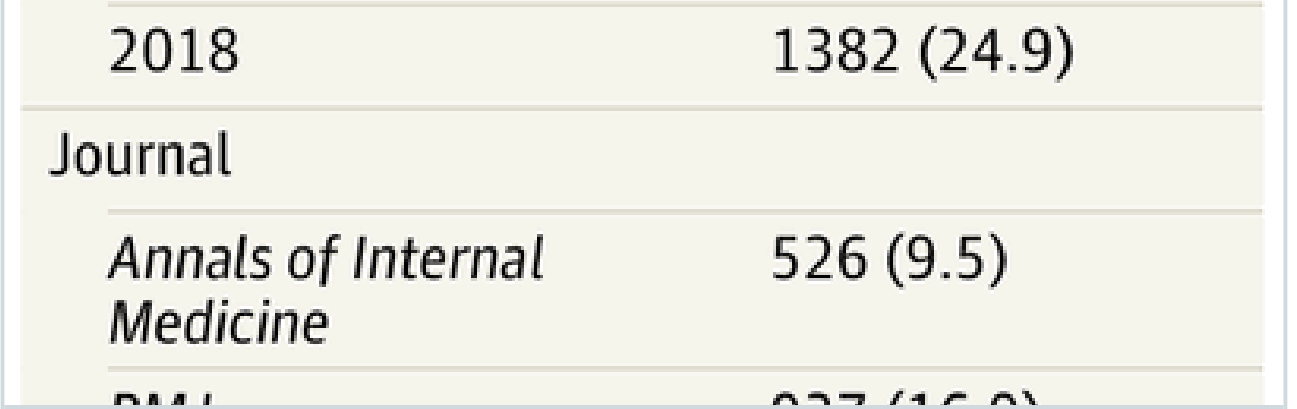


Peter Suber @petersuber@f... @pe... · Jan 18

Update: "Articles [in medicine] written by women as both primary and senior authors had approximately half the number of citations as those authored by men as both primary and senior authors."
jamanetwork.com/journals/jaman...

PS: I'm expanding this thread beyond pandemic effects.

2015	1449 (26.1)
2016	1339 (24.1)
2017	1384 (24.9)



2018	1382 (24.9)
Journal	
Annals of Internal Medicine	526 (9.5)

jamanetwork.com

Gender Disparity in Citations in High-Impact Journal Articles

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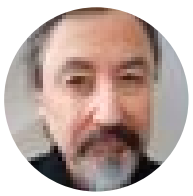
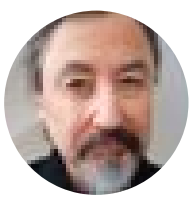


Peter Suber @petersuber@... @pe... · Jan 25

Update. Papers by women are cited less often than papers by men. But they get greater reader engagement & more often aim at social progress. "Citation impact vs interest among readers is related to the aims of research & there is a gender difference here."
eprints.lse.ac.uk/113101/1/impac...

1 4 9



Peter Suber @petersuber@... @pe... · Jan 26

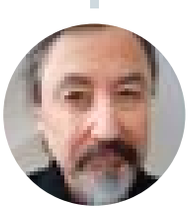
Update. Article submissions to @AnnFamMed grew during the pandemic. But the submission gender gap also grew.
annfammed.org/content/20/1/32

Summary of this article.

news.northwestern.edu

Gender disparities in publishing may be widening for physicians due to COVID-19

1 1 3



Peter Suber @petersuber@... @pe... · Feb 17

Update. "While female inventors' overall involvement in patenting activity is not that high, the share of female inventors increases over the time period in question [1978 - 2019] from 1.2% to 8.9%."

sciencedirect.com

Female inventors over time: Factors affecting female ...

1 2

Peter Suber @petersuber@... @p... · Feb 23

Update, contrary to other studies in this thread: "We found no significant differences between men & women in publication patterns [2019-2021] overall. However, we found significant differences...in different disciplines."

journals.sagepub.com

COVID-19 effect on the gender gap in academic publishing - Dariusz Jemielniak, ...

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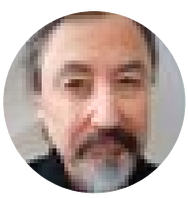


Peter Suber @petersuber@... @p... · Feb 25

Update. "Only 3 fields had a female last author majority by 2018...Female first-authored research tended to be more cited than male first-authored research in most fields (59%), although with a maximum difference of only 5.1%."

journals.sagepub.com

Small female citation advantages for US journal articles in medicine - Mike Thelwall, ...

1 2 2

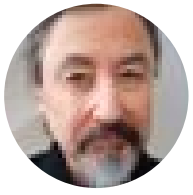
Peter Suber @petersuber@... @p... · Feb 25

Update. Most studies in this thread used software to guess the gender of authors from their names. But "more than 50 pubs representing over 15,000 journals globally are preparing to ask scientists about their race or ethnicity, as well as their gender."

nature.com

The giant plan to track diversity in research journals

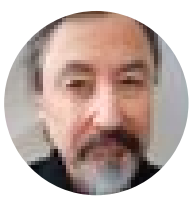
1 1 1



Peter Suber @petersuber@... @p... · Feb 26

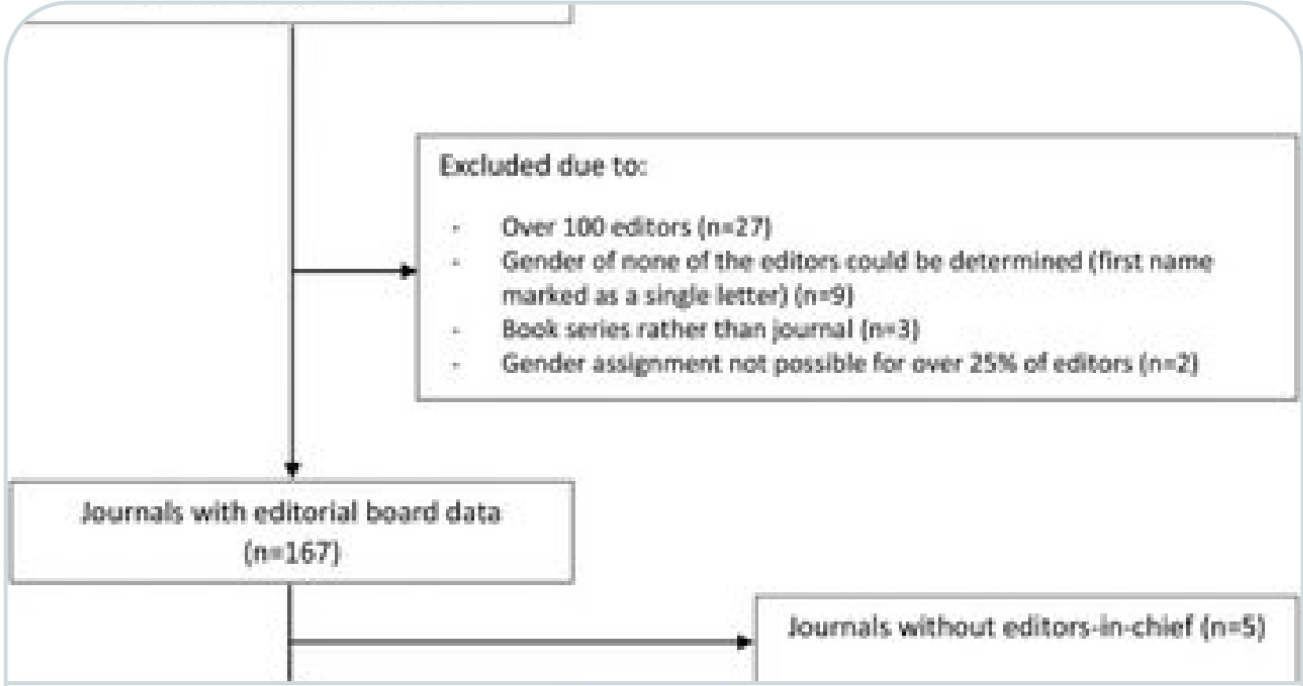
Idea building on prev tweet: @ORCID_Org could add fields for self-identified gender & ethnicity. With user consent, the fields could be public, e.g. for research just like that in this thread. No need to guess gender from names or trust (upcoming) publisher method of labelling.

3 2 7



Peter Suber @petersuber@... @pe... · Feb 27

Update. "Larger editorial boards were less likely to have women dominance. Women editor-in-chief dominance was significantly associated with women-dominant editorial board."



clinicalmicrobiologyandinfection.com

Representation of women in editorial boards of infectious disease and microbiology journa...

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This Tweet is unavailable. Learn more

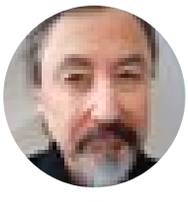
Peter Suber @petersuber@f... @pet... · Apr 5

Update. "Disaggregating [Norwegian scientific authors] by scientific field, institutional affiliation, academic position, and age changes [and reduces] the gender gaps that appear at the aggregate level."

link.springer.com

Identifying gender disparities in research performance: the importance of comparing ...

1 2



Peter Suber @petersuber@... @pe... · Apr 30

Update. "In multiple academic disciplines having a perceived gender of 'woman' is associated w a lower than expected rate of citations...We show that...the tendency of people to interact w others...like themselves...is sufficient to reproduce observed biases."

arxiv.org

Modeling observed gender imbalances in academic citatio...

1 5 6

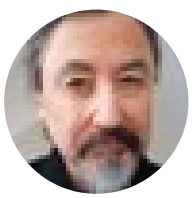
Peter Suber @petersuber@f... @pe... · May 8

Update. "Women [authors are] under-rep'd...in JAMA (at its peak, 38.1% of articles had a female 1st author in 2011) & NEJM (peaking at 28.2% in 2002)...Rate of increase...so slow that it will take more than a century for both journals to reach gender parity."

link.springer.com

The Under-representation and Stagnation of Female, Black, a...

1 1 1



Peter Suber @petersuber@f... @pet... · Jun 2

Update. In veterinary science journals, "females [are] underrepresented in the group of managing editors (32.2% females vs 67.2% males), editors (34.5% females vs 65.1% males) and others (33.3% females vs. 65.4% males)." #paywalled

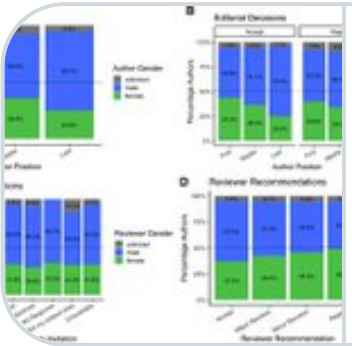
sciencedirect.com

Gender representation on journal editorial boards in the field of ...

1 1

Peter Suber @petersuber@f... @pe... · Jun 18

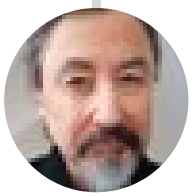
Update. At @BrainComms "the representation of women authors and reviewers decreased...in the months following COVID-19 restrictions, suggesting a possible exacerbating role of the pandemic on existing disparities in science publication."



academic.oup.com

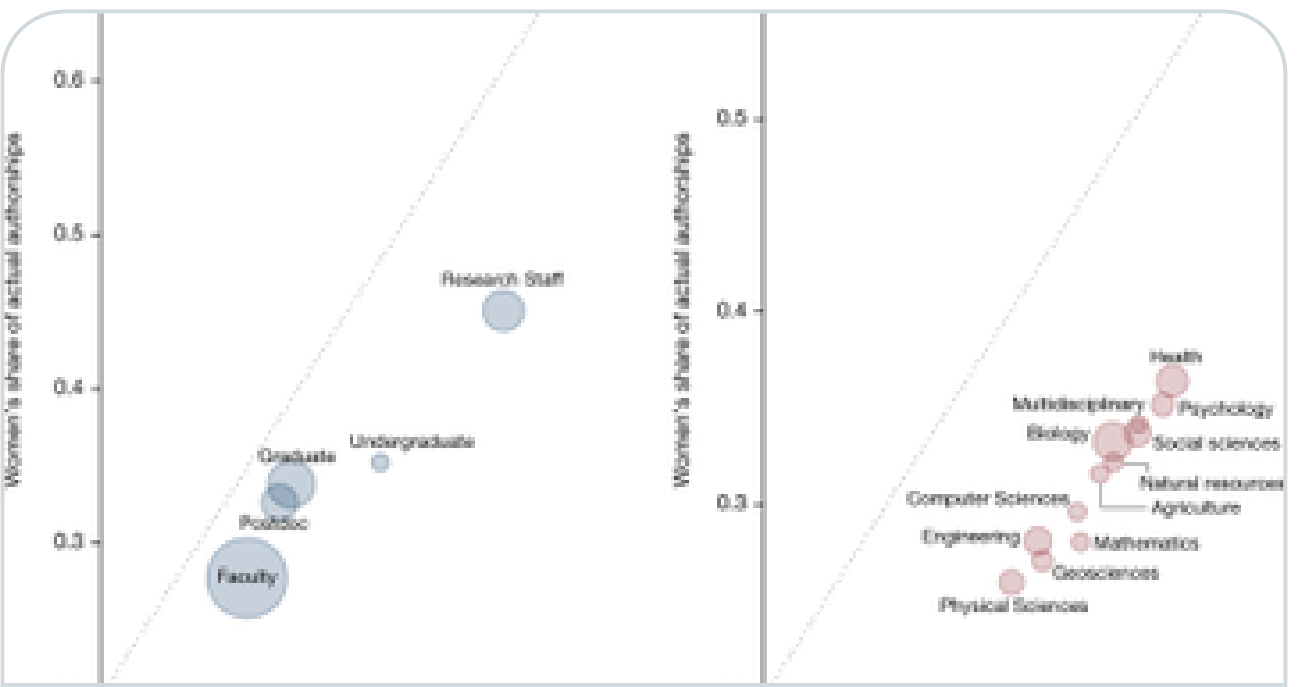
Gender representation in science publication: evidence from Brai...

1 3 6



Peter Suber @petersuber@... @pe... · Jun 24

Update. "Women in research teams are significantly less likely to be credited with authorship than are men."



nature.com

Women are credited less in science than men

1 1

Peter Suber @petersuber@... @pe... · Jun 24

Update. Here's a @washingtonpost summary of the study above.

washingtonpost.com

Female scientists don’t get the credit they deserve. A study proves it.

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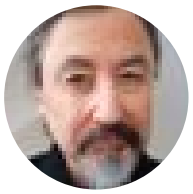
Peter Suber @petersuber@... @pe... · Jun 29

Update. Here's a @ScienceMagazine summary of the study above.

science.org

Women scientists don’t get authorship they should, new study suggests

1 1



Peter Suber @petersuber@f... @pet... · Jul 5

Update. "We review gender bias in scholarly publications and discuss examples of #openaccess research publications that highlight a positive advantage for women."

publications

mdpi.com

Changing the Academic Gender Narrative through Open Access

1 1 2

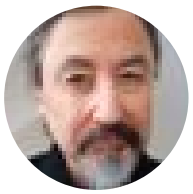
Peter Suber @petersuber@... @p... · Aug 23

Update. "Gendered differences in the productivity and prominence of mid-career researchers can be largely explained by differences in their coauthorship networks...Collaboration networks represent an important form of unequally distributed social capital."

nature.com

Untangling the network effects of productivity and prominence ...

1 3

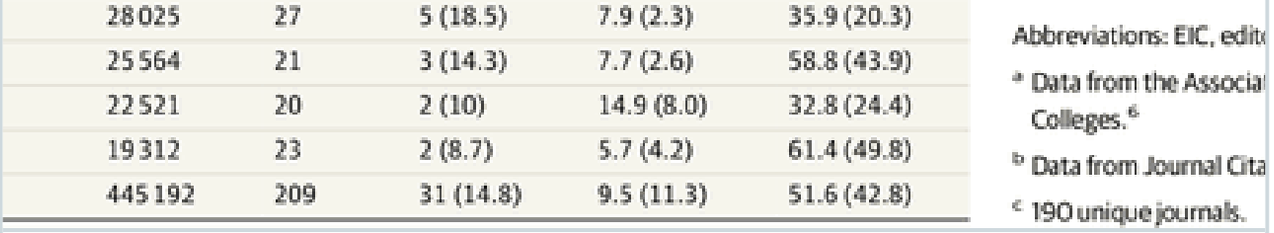


Peter Suber @petersuber@f... @pe... · Sep 1

Update. "Journals that require reporting of methods used to determine sex and/or gender have a significantly higher IF [#JIF] and a significantly greater proportion of EIC positions held by women."

alyzed Medical Specialties and Associated Journals

	Total active physicians 2019[a]	Total EIC positions	Total women EIC, No. (%)	Mean (SD) 2020 IF[b]	Mean (SD) Journal age, y
edicine	120 171	21	8 (38.1)	24.8 (25.6)	86.2 (72.0)
	60 618	22	5 (22.7)	5.7 (3.2)	48.8 (30.7)
	45 202	22	1 (4.5)	3.2 (1.2)	30.5 (13.4)
	42 720	22	4 (18.2)	5.7 (2.8)	51.9 (35.7)
	42 267	21	0 (0)	5.0 (2.1)	49.2 (29.8)
	38 792	21	3 (14.3)	13.4 (10.2)	53.3 (47.5)



28 025	27	5 (18.5)	7.9 (2.3)	35.9 (20.3)
25 564	21	3 (14.3)	7.7 (2.6)	58.8 (43.9)
22 521	20	2 (10)	14.9 (8.0)	32.8 (24.4)
19 312	23	2 (8.7)	5.7 (4.2)	61.4 (49.8)
445 192	209	31 (14.8)	9.5 (11.3)	51.6 (42.8)

Abbreviations: EIC, edit
[a] Data from the Associa
Colleges.[6]
[b] Data from Journal Cita
[c] 190 unique journals.

jamanetwork.com

Analysis of Sex and Gender Reporting Policies in Preeminent Biomedical Journals

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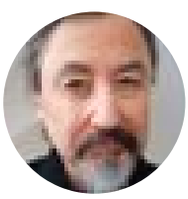

Peter Suber @petersuber@f... @pe... · Sep 6

Update. In the #MENA region, "men publish on average between 11% and 51% more than women, with this gap increasing over time."
arxiv.org/abs/2208.13520

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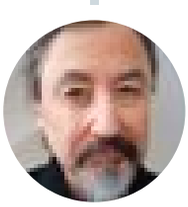


Peter Suber @petersuber@... @pe... · Sep 12

Update: The Journal of Bone & Mineral Research studied itself. "The acceptance rate [2017-2019] was highest when the first & last authors were of different genders & lowest when both authors were men. Reviewer gender did not influence the outcome."

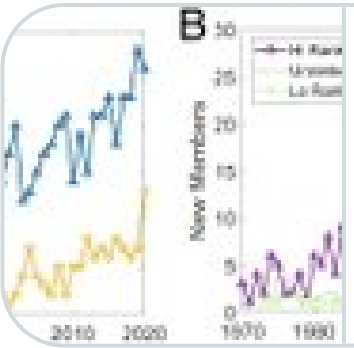
asbmr.onlinelibrary.wiley.com

Gender and Geographic Origin as Determinants of Manuscript ...

1 1

Peter Suber @petersuber@... @p... · Sep 27

Update. "We identify gender disparities in the patterns of peer citations and show that these differences are strong enough to accurately predict the scholar's gender."



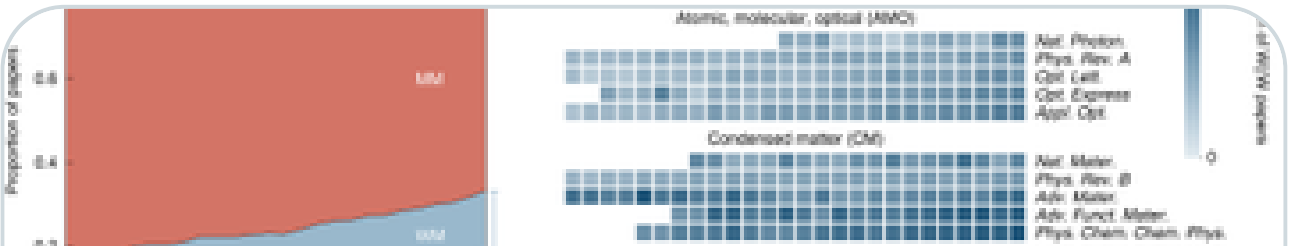
pnas.org

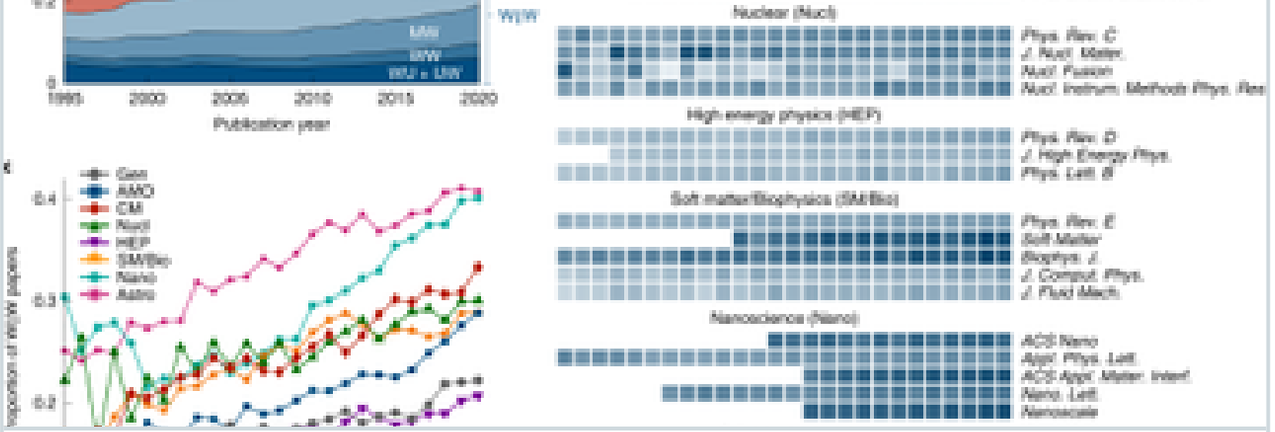
Gendered citation patterns among the scientific elite | ...

1 2 1

Peter Suber @petersuber@... @pe... · Oct 13

Update. "We find a global bias wherein [physics] papers authored by women are significantly under-cited & papers authored by men are significantly over-cited...[These disparities depend on] who is citing, where they are citing & what they are citing."





nature.com

Citation inequity and gendered citation practices in contemporary physics

1 2 2

Peter Suber @petersuber@... @pe... · Oct 13

Update. Here's a good summary of the previous article in this thread.

physicsworld.com

Citing like it's 1995: why women physicists find their papers referenced less – Physics World

1

Peter Suber @petersuber@... @pe... · Oct 14

Update. Here's another good summary of the same study.

science.org

Women researchers are cited less than men. Here’s why—and what can be done about it

1 1 3

Peter Suber @petersuber@... @pe... · Oct 15

Update. "Women's share of [highly-cited researchers] would need to increase by 100% in health & social sciences, 200% in agriculture, bio, earth, & enviro sciences, 300% in math & physics, & 500% in chem, CS, & engineering to close the gap with men."

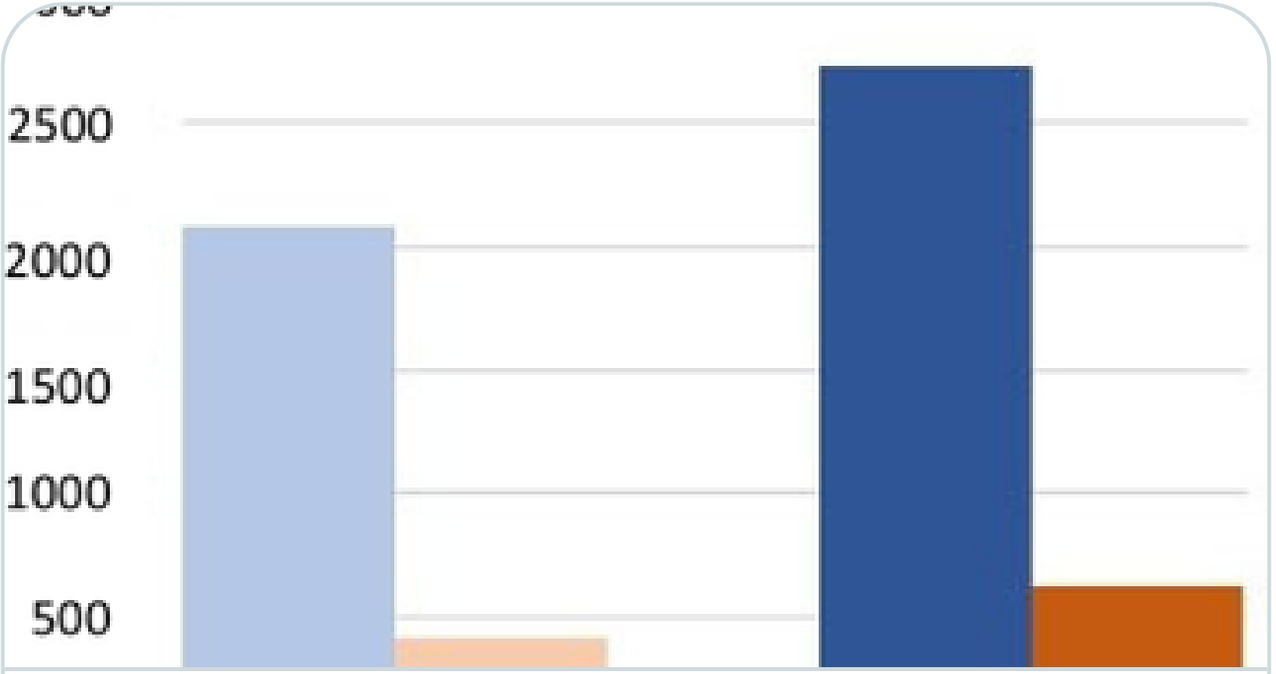
direct.mit.edu

Gender gap among highly cited researchers, 2014–2021

1 2 2

Peter Suber @petersuber@... @pe... · Oct 18

Update. Study of the 57 @IOPPublishing journals: "Contrary to our hypothesis, we did not find that manuscript submissions from women decreased during the pandemic, although the rate of increased submissions evident prior to the pandemic slowed."



nature.com

Scientific authorship by gender: trends before and during a global pandemic

1 1 1

Peter Suber @petersuber@... @pe... · Oct 27

Update. "Women were 2.5 times as likely as men to forgo a professional development in order to pay APCs."

aaas.org

AAAS Survey: Many Researchers Face Difficulties Paying Open ...

1

Peter Suber @petersuber@... @pe... · Nov 12

Update. "Publications by women are cited less by @Wikipedia than expected...& less likely to be cited than those by men...Gender- or country-based inequalities varies by research field & the gender-country...bias is prominent in math-intensive STEM fields."

asistdl.onlinelibrary.wiley.com

Gender and country biases in Wikipedia citations to scholarly ...

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Peter Suber @petersuber@f... @pet... · 23h

Update. In psychology, "relative to ratios as students and faculty, women are underrepresented as editorial-board members (41%) and...as editors-in-chief (34%)."

journals.sagepub.com

Contextualizing Gender Disparity in Editorship in Psychological Science - Zhicheng Lin, Ning...